

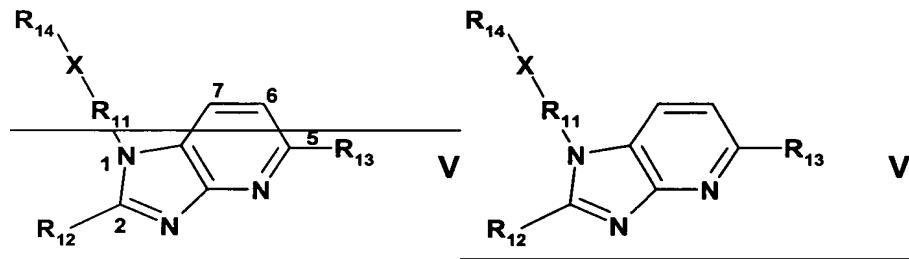
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 5. (Cancelled).

Claim 6. (Currently amended) A compound according to formula V in free or pharmaceutically acceptable salt form



wherein

R₁₁ is pyrimidyl;

X is -NR₆-Y-, -O- or -S-,

wherein R₆ is H, C₁-C₄alkyl, C₆-C₁₈aryl, C₃-C₁₈heteroaryl, C₇-C₁₉aralkyl or C₄-C₁₉heteroaralkyl, and -Y- is C₁-C₄alkylene or a direct bond;

R₁₂ is phenyl, optionally substituted by one or more substituents, each of which is independently selected from

halo,

CF₃,

cyano,

amido or thioamido which is optionally mono- or di-N-substituted by C₁-C₄alkyl or the N atom of which forms a 5-7 membered heterocyclic ring optionally containing an additional hetero atom selected from O, S or N which N is optionally C₁-C₄alkyl C₁-C₄alkylcarbonyl or C₁-C₄alkylthiocarbonyl substituted,

carboxylate or thiocarboxylate optionally in the form of an optionally halo-substituted C₁-C₁₀alkoxy, C₂-C₁₀alkenoxy, C₂-C₁₀alkynoxy, C₃-C₇cyclalkoxy, C₅-C₇cycloalkenoxy, aryloxy, arylalkoxy, heteroaryloxy or heteroarylalkoxy ester, optionally mono- or di-C₁-C₄alkyl-substituted-C₀-C₁alkyl optionally C₁-C₄alkyl- or C₃-C₅cycloalkyl-substituted-carbonyl or -thiocarbonyl,

optionally halo-substituted-C₁-C₄alkoxy, C₂-C₄alkenoxy, C₂-C₄alkynoxy, C³₃-C⁶₅cycloalkoxy or C³₃-C⁵₅cyclothioalkoxy,

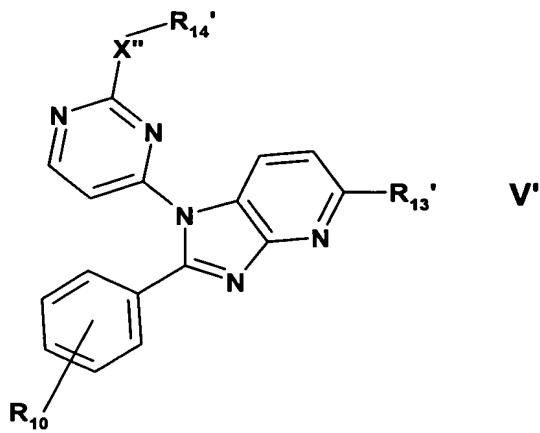
optionally halo substituted C₁-C₄ alkyl,

oxycarbonyl or optionally N-C₁-C₄alkyl-substituted aminocarbonyl both of which are optionally C₁-C₄alkyl or C₃-C₅cycloalkyl substituted (including thiocarbonyl analogues thereof),
optionally mono- or di-C₁-C₄alkyl-substituted -C₀-C₁alkylamine which is optionally mono- or di-N-C₁-C₄ alkyl substituted,
optionally mono- or di-C₁-C₄alkyl-substituted-C₀-C₁alkyl optionally N-C₁-C₄alkyl-substituted amino-carbonyl or -thiocarbonyl,
optionally N-C₁-C₄ alkyl-substituted amino-sulphanyl or -sulphonyl optionally substituted by
optionally mono- or -di-N-C₁-C₄alkyl-substituted amino,
a nitrogen atom which form a heterocyclic ring of 5 to 7 members optionally containing an additional heteroatom selected from O, S or N which N is optionally C₁-C₄ alkyl C₁-C₄alkylcarbonyl or C₁-C₄alkylthiocarbonyl substituted, or sulphanyl or sulphonyl optionally substituted by
optionally halo-substituted-C₁-C₄alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl,
optionally mono- or di-N-C₁-C₄alkyl-substituted amino,
a nitrogen atom which form a heterocyclic rind of 5 to 7 members optionally containing an additional heteroatom selected from O, S or N which N is optionally C₁-C₄alkyl C₁-C₄alkylcarbonyl or C₁-C₄alkylthiocarbonyl substituted;

R₁₃ is H, amino, C₁-C₁₀alkyl, C₃-C₁₀cycloalkyl, C₃-C₁₈heterocycloalkyl, C₆-C₁₈aryl, or C₃-C₁₈heteroaryl all optionally substituted by up to 4 substituents separately selected from C₁-C₄alkyl, halogen, halo-substututed-C₁-C₄alkyl, hydroxyl, C₁-C₄alkoxy, C₁-C₄alkylthio, C₆-C₁₈aryl, C₃-C₁₈heteroaryl, C₆-C₁₈arylC₁-C₄alkyl, C₃-C₁₈heteroarylC₁-C₄alkyl, C₃-C₁₈heterocycloalkyl or optionally mono- or di-N-C₁-C₄alkyl substituted amino all of which are optionally substituted by halo, hydroxyl, C₁-C₄alkyl, C₁-C₄alkoxy or C₁-C₄alkoxycarbonyl; and

R₁₄ is C₁-C₁₀alkyl, C₆-C₁₈aryl, C₃-C₁₈heteroaryl, or C₃-C₁₂cycloalkyl optionally substituted by up to 3 substituents separately selected from C₁-C₄alkyl, halogen, halo-substituted-C₁-C₄alkyl, hydroxyl, C₁-C₄alkoxy, C₁-C₄alkylthio, optionally mono- or di-N-C₁-C₄alkyl substituted amino, or by N-heterocycll containing from 5 to 7 ring atoms and optionally containing a further hetero atom selected from O, S or N[[.]]
~~and pharmaceutically acceptable and cleavable esters thereof and acid addition salts thereof.~~

Claim 7. (Currently amended) A compound according to claim 6 of formula V' in free or pharmaceutically acceptable salt form



wherein

R_{14}' is phenyl or C_3 - C_7 cycloalkyl each of which is optionally mono-substituted by halogen, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, hydroxyl, trihalomethyl optionally mono- or di- N - C_1 - C_4 alkyl substituted amino, or by N -heterocyclyl containing from 5 to 7 ring atoms and optionally containing a further hetero atom selected from O, S or N;

R_{10} is halogen, CF_3 , C_1 - C_4 alkyl or C_1 - C_4 alkoxy;

R_{13}' is pyridyl, pyrimidyl, piperazinyl, piperidinyl, NR_9R_{10} , $-CH_2OH$, $CH_2NR_{15}R_{16}$, $-CH_2CH_2R_{15}R_{16}$, or Het- C_1 - C_4 alkyl-,

wherein

R_9 and R_{10} are separately selected from H, C_1 - C_4 alkyl, C_6 - C_{18} aryl, C_3 - C_{18} heteroaryl, C_6 - C_{18} aryl- C_1 - C_4 alkyl, C_3 - C_{18} heteroaryl- C_1 - C_4 alkyl all of which are optionally substituted by halo, hydroxyl, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkoxycarbonyl[.]:

R_{14} and R_{12} are separately selected from H or C_1 - C_6 alkyl, and

Het is N -heterocyclyl containing from 5 to 7 ring atoms and optionally containing a further hetero atom (e.g. O, S or N) is a N -heterocyclyl containing from 5 to 7 ring atoms where said ring atoms optionally containing a further heteroatom selected from the group consisting of O, S, and N;

R_{15} and R_{16} are independently selected from H and C_1 - C_4 alkyl;

X'' is $-NH-Y'$, $-O-$ or $-S-$, where Y' is $'CH_2-$, $-CH_2-CH_2-$, $-CH_2(CH_3)-$ or a direct bond, and pharmaceutically acceptable and cleavable esters thereof and acid addition salts thereof.

Claim 8. (Currently amended) A compound according to claim 6 selected from:

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(piperidino-N-2-ethyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(N,N-diethylamino-N-2-ethyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(morpholino-N-2-ethyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(isopropylamino-N-2-ethyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(pyrrolidino-N-2-ethyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(3-pyridyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(4-pyridyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-(S)-phenylethyl)amino-4-pyrimidinyl)-5-(aminoimidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-(S)-phenylethyl)amino-4-pyrimidinyl)-5-(aminoimidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-(S)-phenylethyl)amino-4-pyrimidinyl)-5-(4-NH-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(4-NH-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclobutylamino-4-pyrimidinyl)-5-(4-NH-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopropylamino-4-pyrimidinyl)-5-(4-NH-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-(S)-phenylethyl)amino-4-pyrimidinyl)-5-(4-methyl-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(4-methyl-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclobutylamino-4-pyrimidinyl)-5-(4-methyl-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopropylamino-4-pyrimidinyl)-5-(4-methyl-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-(S)-phenylethyl)amino-4-pyrimidinyl)-5-(4-(2-hydroxy-2-methyl)propyl-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-((4-(2-hydroxy-2-methyl)propyl-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclobutylamino-4-pyrimidinyl)-5-((4-(2-hydroxy-2-methyl)propyl-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopropylamino-4-pyrimidinyl)-5-((4-(2-hydroxy-2-methyl)propyl-1-piperazinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(4-piperidinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(1-methyl-4-piperidinyl)imidazo[4,5-b]pyridine;

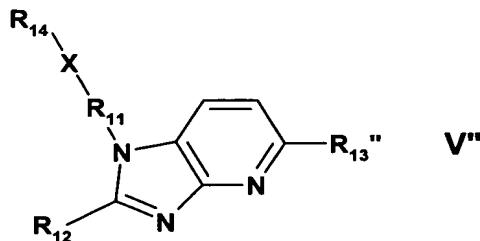
2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(1-(2-hydroxy-2-methyl)propyl-4-piperidinyl)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(benzylamino)imidazo[4,5-b]pyridine;

2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(morpholino) imidazo[4,5-b]pyridine;
 2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(3-fluorophenyl amino)imidazo[4,5-b]pyridine;
 2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(pyridyl-4-amino)imidazo[4,5-b]pyridine;
 2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(1-ethoxycarbonyl piperidine-4-amino)imidazo[4,5-b]pyridine; and
 2-(4-Fluorophenyl)-1-(2-cyclopentylamino-4-pyrimidinyl)-5-(piperidine-4-amino)imidazo[4,5-b]pyridine[;].

Claim 9. (Currently amended) A process for the production of

(i) an Agent of the Invention a compound of formula V" in free or pharmaceutically acceptable salt form



wherein

R_{11} is pyrimidyl[;]

R_{12} is phenyl, optionally substituted by one or more substituents, each of which is

independently selected from

halo,

CF_3 ,

cyano,

amido or thioamido which is optionally mono- or di-N-substituted by $\text{C}_1\text{-}\text{C}_4$ alkyl or the N atom of which forms a 5-7 membered heterocyclic ring optionally containing an additional hetero atom selected from O, S or N which N is optionally $\text{C}_1\text{-}\text{C}_4$ alkyl $\text{C}_1\text{-}\text{C}_4$ alkylcarbonyl or $\text{C}_1\text{-}\text{C}_4$ alkylthiocarbonyl substituted,

carboxylate or thiocarboxylate optionally in the form of an optionally halo-substituted $\text{C}_1\text{-}\text{C}_{10}$ alkoxy, $\text{C}_2\text{-}\text{C}_{10}$ alkenoxy, $\text{C}_2\text{-}\text{C}_{10}$ alkynoxy, $\text{C}_3\text{-}\text{C}_7$ cyclalkoxy, $\text{C}_5\text{-}\text{C}_7$ cycloalkenoxy, aryloxy, arylalkoxy, heteroaryloxy or heteroarylalkoxy ester, optionally mono- or di- $\text{C}_1\text{-}\text{C}_4$ alkyl-substituted- $\text{C}_0\text{-}\text{C}_1$ alkyl optionally $\text{C}_1\text{-}\text{C}_4$ alkyl- or $\text{C}_3\text{-}\text{C}_5$ cycloalkyl-substituted-carbonyl or -thiocarbonyl,

optionally halo-substituted- $\text{C}_1\text{-}\text{C}_4$ alkoxy, $\text{C}_2\text{-}\text{C}$ alkenoxy, $\text{C}_2\text{-}\text{C}$ alkynoxy, $\text{C}_3\text{-}\text{C}_5$ cycloalkoxy or $\text{C}_3\text{-}\text{C}_5$ cyclothioalkoxy,

optionally halo substituted C₁-C₄ alkyl,
oxycarbonyl or optionally N-C₁-C₄alkyl-substituted aminocarbonyl both of which are
optionally C₁-C₄alkyl or C₃-C₅cycloalkyl substituted (including thiocarbonyl analogues
thereof),
optionally mono- or di-C₁-C₄alkyl-substituted -C₀-C₁alkylamine which is optionally mono- or
di-N-C₁-C₄ alkyl substituted,
optionally mono- or di-C₁-C₄alkyl-substituted-C₀-C₁alkyl optionally N-C₁-C₄alkyl-substituted
amino-carbonyl or -thiocarbonyl,
optionally N-C₁-C₄ alkyl-substituted amino-sulphanyl or -sulphonyl optionally substituted by
optionally mono- or -di-N-C₁-C₄alkyl-substituted amino,
a nitrogen atom which form a heterocyclic ring of 5 to 7 members optionally
containing an additional heteroatom selected from O, S or N which N is optionally
C₁-C₄ alkyl C₁-C₄alkylcarbonyl or C₁-C₄alkylthiocarbonyl substituted, or
sulphanyl or sulphonyl optionally substituted by
optionally halo-substituted-C₁-C₄alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl,
optionally mono- or di-N-C₁-C₄alkyl-substituted amino,
a nitrogen atom which form a heterocyclic rind of 5 to 7 members optionally
containing an additional heteroatom selected from O, S or N which N is optionally
C₁-C₄alkyl C₁-C₄alkylcarbonyl or C₁-C₄alkylthiocarbonyl substituted;

R₁₄ is C₁-C₁₀alkyl, C₆-C₁₈aryl, C₃-C₁₈heteroaryl, or C₃-C₁₂cycloalkyl optionally substituted by up to 3 substituents separately selected from C₁-C₄alkyl, halogen, halo-substitued-C₁-C₄alkyl, hydroxyl, C₁-C₄alkoxy, C₁-C₄alkylthio, optionally mono- or di-N-C₁-C₄alkyl substituted amino, or by N-heterocycl containing from 5 to 7 ring atoms and optionally containing a further hetero atom selected from O, S or N and ;

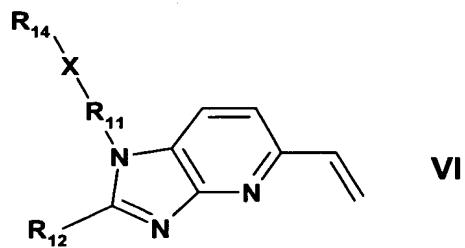
X is -NR₆-Y-, -O- or -S-, wherein R₆ is H, C₁-C₄alkyl, C₆-C₁₈aryl, C₃-C₁₈heteroaryl, C₇-C₁₉aralkyl or C₄-C₁₉heteroaralkyl, and -Y- is C₁-C₄alkylene or a direct bond; are as previously defined and

R₁₃" is -CH₂-CH₂NR₁₅R₁₆ or - CH₂-CH₂-Het wherein

R₁₅[[,]] and R₁₆ are independently selected from H and C₁-C₄ alkyl; and

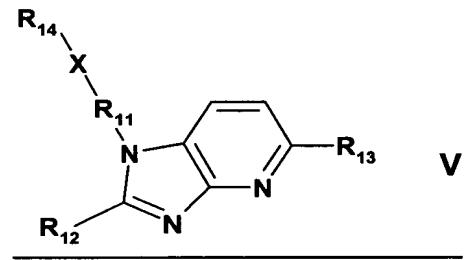
Het are as previously defined is a N-heterocycl containing from 5 to 7 ring atoms where said ring atoms optionally containing a further heteroatom selected from the group consisting of O, S, and N;

comprising reacting a corresponding vinyl precursor of formula VI

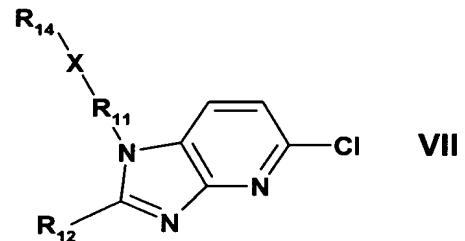


wherein R₁₁, R₁₂, R₁₄ and X are as previously defined with the corresponding amine of formula HNR₁₅R₁₆ or N-heterocycloalkyl ring compound;

(ii) ~~an Agent of the Invention~~ a compound of formula V according to claim 6



wherein R₁₃ is aryl or heteroaryl comprising arylation or heteroarylation of a compound of formula VII



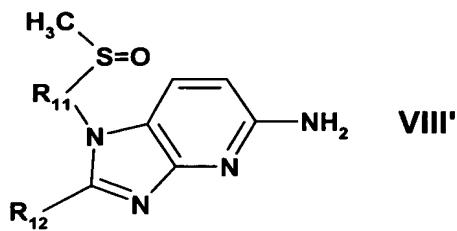
wherein R₁₁, R₁₂, R₁₄ and X are as previously defined in claim 6;

(iii) ~~an Agent of the Invention~~ a compound of formula V according to claim 6

wherein R₁₃ is -N-heterocycloalkyl, -NH-aryl, -NH-heteroaryl, -NH-heterocycloalkyl, -NH-(C₁-C₄alkyl)-heterocycloalkyl, -NH-(C₁-C₄alkyl)-aryl, -NH-(C₁-C₄alkyl)-heteroaryl, or -NH-(C₁-C₄alkyl)-heterocycloalkyl comprising coupling a corresponding chloroprecursor compound of formula VII, as defined above, with the corresponding N-heterocycloalkyl compound or amine;

(iv) ~~an Agent of the Invention~~ a compound of formula V according to claim 6

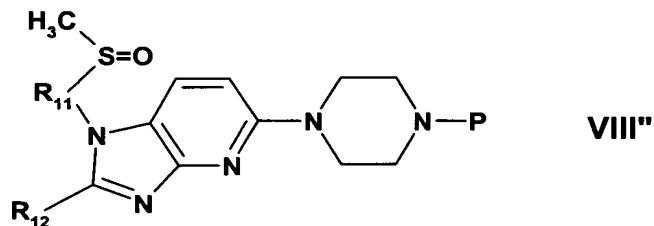
in which R₁₃ is -NH₂, comprising reacting the corresponding methyl sulphinyl compound of formula VIII'



wherein R₁₁ and R₁₂ are as previously defined in claim 6;

(v) an Agent of the Invention a compound of formula V according to claim 6

in which R₁₃ is piperazinyl, comprising reacting a corresponding methylsulphinyl compound of formula VIII"



wherein R₁₁ and R₁₂ are as previously defined in claim 6 and P is an N protecting group, with the corresponding amine of formula R₁₄-NH₂; and

(vi) recovering the resultant compounds of formula (V'') or (V) in free or pharmaceutically acceptable salt form.

Claims 10 - 13. (Cancelled).